

REMARKS

The Examiner's Answer mailed May 18, 2006 and the final Office Action mailed September 14, 2004, have been received and reviewed. Claims 1, 3 through 27, 31 through 40, 42 and 43 are currently pending in the application. All claims stand rejected. Applicants have filed this amendment with a Request for Continued Examination prior to a decision by the Board of Appeals. *See*, MPEP §1215.01. Applicants wish to withdraw the application from appeal and to reopen prosecution of the application. This amendment is accompanied by the appropriate fee set forth under 37 CFR 1.17(e). All claims are amended herein. Throughout the claims, the term "said" has been replaced by the equivalent term "the." Thus the scope of the claims with respect to this term remains unchanged. Claim 23 is canceled without prejudice or disclaimer. Reconsideration is respectfully requested.

Objection to the Specification

The specification stands objected to because in various instances it states that the term "selective to" denotes that a particular layer is etched slower while in others it allegedly denotes that a particular layer is etched faster. The Office Action, therefore, concludes that the specification is self-contradicting. Applicants respectfully disagree. However, in an effort to expedite prosecution, applicants have amended the specification on page 14, lines 14-25 to replace the term "selective to." No new matter is added. Applicants respectfully submit the paragraph more clearly denotes that the isolation film is etched faster than the insulator island during planarization. Reconsideration and withdrawal of the objection is requested.

Objection to the Drawings

A. The drawings have been objected to as allegedly failing to comply with 37 C.F.R. § 1.84 (p)(4) because the reference characters 14 and 44 have both been used to designate "pad oxide layer." Specifically, it was thought that in FIG. 7B, "pad oxide" layer formed between polysilicon island 24 and substrate 12 is denoted as "14," while in FIG. 8B, the same pad oxide layer is denoted as "44."

Applicants respectfully note that Figures 7B and 8B depict different steps in the methods of the invention and, therefore, do not necessarily depict identical structures. As noted at page

16, lines 12-14 of the application as filed, “[f]or example, pad oxide 14 may be removed by using aqueous HF to expose second upper surface 40. A new oxide layer, gate oxide layer 44, may then be formed on second upper surface 40 having third upper surface 42.” Thus, reference character “44” is used in conjunction with Figure 8A and refers to a “gate oxide layer 44,” which is differentiated from a “pad oxide layer 14.” This is consistent with page 19, line 16 of the Specification, wherein a gate oxide layer is formed in the embodiment discussed with Figure 8B. In other words, a gate oxide layer 44 is shown in Figure 8B as intended. Reconsideration and withdrawal of the objection is requested.

B. Additionally, the drawings stand objected to for failing to show “forming said liner upon said sidewall of each isolation trench comprises deposition of a composition of matter” (claim 23). Applicants respectfully submit that claim 23 has been canceled and, thus, this objection is moot.

Claim Objections

A. Claims 14-23, 25-27, and 31-40 stand objected to under 37 C.F.R. § 1.75 for being of improper dependent form for failing to further limit the subject matter of a previous claim. Particularly, the Office Action states that there is no nexus between claim 14’s recited “material that is electrically insulative” (and similar recitations in the other rejected claims) and the other layers in the body of the claims. Applicants respectfully traverse the rejection.

Applicants note with reference to FIGs. 8A and 8B, that the Specification at page 15, lines 18-22 identifies an embodiment of the invention wherein a continuous (and electrically insulative) isolation structure includes parts of an isolation film, a pad oxide layer, an insulation liner, and a spacer. In other words, the claimed “material that is electrically insulative” is not necessarily simply the “conformal layer” as required by the Examiner at page 4 of the Office Action. Applicants therefore respectfully request the prompt removal of this objection.

B. Claim 23 is objected to recites a limitation not shown in the drawings and the drawings should therefore be objected to under 37 C.F.R. § 1.83(a). As claim 23 has been canceled, the rejection is moot.

C. Claim 34 stands rejected for reciting the incorrect term. Particularly, the Office Action states that claim 34 should read: “a layer composed of polysilicon upon said ~~gate~~-oxide layer.” (strikeout added to denote suggested deletion). Applicants respectfully disagree.

As acknowledged by the Examiner with reference to Figure 8B, gate oxide layer 44 is formed on semiconductor substrate 12 after exposing a surface on semiconductor substrate 12. As illustrated in Figure 8B, polysilicon island 24 is formed over gate oxide layer 24. Accordingly, Applicants respectfully assert that the objected to features of claim 34 are clearly demonstrated in the Specification and Drawings as filed, and no amendments are therefore necessary.

35 U.S.C. §112

A. Claims 1 and 3-6 stand rejected under 35 U.S.C. § 112, first paragraph, for containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Particularly, the Office Action alleges that there is no written description support for the recitation “so as to define an upper surface contour of the conformal layer; and planarizing the conformal layer beginning with the upper surface contour of the conformal layer and extending at least to the first dielectric layer.” Applicants respectfully traverse the rejection.

Initially, Applicants note that “drawings alone may provide a ‘written description’ of an invention as required by Sec. 112.” *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1565, 19 U.S.P.Q.2d 1111, 1118 (Fed. Cir. 1991); see also M.P.E.P. (5th ed.) § 2163(II)(A)(3)((a). Accordingly, Applicants respectfully assert the above rejected limitation finds support, in addition to the Specification, in Figures 6A and 6B of the application as filed.

Regarding the limitation “so as to define an upper surface contour of the conformal layer,” Appellant notes that isolation film 36 (one embodiment of the conformal layer) in Figure 6A has a contoured upper surface that is formed over the underlying structures. (See also Specification at page 13, lines 22-24). Although this language is not explicitly recited in the

Specification, such is not required, as noted above.

Regarding the subsequent limitation, “planarizing the conformal layer beginning with the upper surface contour of the conformal layer and extending at least to the first dielectric layer,” such is inherent in at least the definition of chemical mechanical planarization (CMP), which is described in the Specification as a preferred embodiment of the invention. See page 14, lines 14-17. It is well known by those skilled in the art that CMP is a partly mechanical, partly chemical process wherein a rotating polishing pad and a chemical slurry, for example, work together to flatten a material from upper surface downward. A conventional rotating pad used in CMP would necessarily start with the uppermost surface, here the upper surface contour.

Accordingly, Applicants respectfully assert that the application as filed contains a description in the specification that reasonably conveys to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the above claimed features of the invention. Reconsideration and withdrawal of the rejection is requested.

B. Claims 14-27, 31-40, and 43 stand rejected under 35 U.S.C. § 112, first paragraph, for containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Particularly, the Office Action states that there does not appear to be a written description of the claim limitation “planarizing is performed in the absence of masking the conformal layer over each said isolation trench.” Applicants respectfully traverse the rejection.

In the rejection the Examiner cites a section of the MPEP which states in part:

The current view of the courts is that there is nothing inherently ambiguous or uncertain about a negative limitation. So long as the boundaries of the patent protection sought are set forth definitely, albeit negatively, the claim complies with the requirements of 35 U.S.C. 112, second paragraph.

* * *

The mere absence of a positive recitation is not basis for an exclusion.

MPEP 2173.05(i), 8 ed. Rev. 2, (emphasis added).

Operations such as planarizing and selective removing are performed by chemical mechanical planarization or polishing (CMP) in embodiments of this invention that are disclosed in the Specification. (*See, e.g.*, Specification, p. 3, lines 25-26, p. 6, lines 1-3, p. 15, l. 4, p. 20, lines 15-17). The practice of CMP does not rely on masking, but it is known in contrast for its use to achieve an overall planar surface, sometimes referred to as global planarity. Applicants submit that this knowledge of a person of ordinary skill in the art, together with the disclosure in the Application of CMP for selective removing and/or planarizing, clearly delineate the bounds of the claimed invention. Reconsideration and withdrawal of the rejection is requested.

C. Claim 23 stands rejected under 35 U.S.C. § 112, first paragraph “because the specification . . . does not reasonable provide enablement for the claims.” Applicants submit that the rejection is moot as claim 23 has been canceled.

D. Claims 9, 10, 12, 13, 26, and 27 stand rejected under 35 U.S.C. § 112, second paragraph, as failing to set forth the subject matter that Applicants regard as their invention. Applicants respectfully traverse the rejection.

In an effort to expedite prosecution, claim 9 has been amended to recite “removing the first dielectric layer using an etch recipe that etches the first dielectric layer faster than the conformal layer and the spacers by a ratio in a range from about 1:1 to about 2:1.” Support for the amendment may be found throughout the as-filed specification, including, for example, page 15, lines 11-15.

With respect to claim 12, the claim includes removal of the insulator island (e.g., reduced island or first dielectric layer). Accordingly, this claim is consistent with the specification and figures. (*See, e.g.*, FIGs. 7A and 7B and page 15, lines 11-15, “Reduced island 52 is preferably removed with an etch that is selective to isolation film 36 and spacer 28, leaving an isolation structure 48 that extends into and above isolation trench 32, forming a nail shaped structure having a head 54 extending above and away from isolation trench 32 upon an oxide layer 44.”).

Independent claim 26 of the presently claimed invention recites “planarizing the

conformal third layer in a single-step by an etch using an etch recipe that etches the conformal third layer and the spacers faster than the first dielectric.” The remaining claims do not include the rejected language. Reconsideration and withdrawal of the rejections is requested.

35 U.S.C. §103(a)

A. Claims 1, 3-27, and 31-34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,097,072 to Omid-Zohoor (hereinafter “Omid-Zohoor”) in view of U.S. Patent 5,387,540 issued to Poon (hereinafter “Poon”). Claim 23 has been canceled, thus the rejection of this claim is moot. Applicants respectfully submit that claims 1, 3-22, 24-27, and 31-34 are nonobvious over the ‘072 patent in combination with Poon.

Omid-Zohoor discloses a method of forming trenches with suppressed parasitic edge transistors. Trenches 360 are formed in a substrate 120 having a pad oxide layer 340 and silicon nitride layer 344 thereon. (Omid-Zohoor, FIG. 3I). Spacers 356 may flank the trenches 360. A thick oxide layer 364 is deposited to cover the wafer and fill the trenches 360. A reverse mask 368 is placed over defined trench regions. The mask is followed by an etch which creates oxide ridges. (Omid-Zohoor, col. 4, lines 47-55, FIG. 3L). The upper surface of the oxide layer 372 is polished to expose the silicon nitride layer 344. (*Id.*, FIG. 3M). Poon is cited for teaching the formation of a thermal liner within a trench surface. Applicants respectfully submit the proposed combination of references fail to teach or suggest every element of the presently claimed invention.

Independent claim 1 of the presently claimed invention recites, in part “filling each isolation trench with a conformal layer. . . so as to define an upper surface contour of the conformal layer” and “directly planarizing the conformal layer beginning with the upper surface contour of the conformal layer and extending at least to the first dielectric layer and each spacer to form therefrom an upper surface for each isolation trench that is co-planar to the other upper surfaces.” Support for the amendment may be found throughout the specification, including, for example, FIGs. 6A and 6B and related text and page 14, line 14– page 15, line 10.

By contrast, Omid-Zohoor teaches a multi-step process for planarizing the oxide layer 354 including the deposition of a reverse- resist mask 368 over trench regions 356 (Omid-

Zohoor, FIG. 3K, col. 4, lines 51-52) and subsequent wet or dry etch to partially remove oxide layer 364 and leave a reduced oxide layer 372 with ridges 373 (*Id.*, FIG. 3L, col. 4, lines 52-54). It is this reduced oxide layer 372 with oxide ridges 373 that is subsequently treated by chemical-mechanical polishing (planarizing) until silicon nitride layer 344 is exposed (Omid-Zohoor, FIG. 3M, col. 4, lines 54-57, 59-61). Accordingly, the method disclosed in Omid-Zohoor does not teach or suggest directly planarizing the conformal layer “beginning with the upper surface contour of the conformal layer” as recited in claim 1 of the presently claimed invention. Poon fails to cure the deficiencies of Omid-Zohoor. As the proposed combination of references fails to teach or suggest every element of the presently claimed invention, Applicants respectfully submit Omid-Zohoor in view of Poon cannot render claim 1 of the presently claimed invention obvious. Accordingly, claim 1 is allowable.

Claims 3-6 are each allowable as depending from allowable claim 1.

Independent claim 7 is allowable at least for substantially the same reasons as independent claim 1. Claim 7 of the presently claimed invention recites in part “filling each isolation trench with a conformal layer. . . to a first thickness of the conformal layer relative to the spacers and the first dielectric layer” and “planarizing the first thickness of the conformal layer to a second reduced thickness in a single-step to form therefrom an upper surface for each isolation trench that is co planar to the other upper surfaces.” Support for the amendment may be found throughout the specification, including, for example, FIGs. 6A and 6B and related text and page 14, line 14– page 15, line 10.

As discussed herein, Omid-Zohoor fails to teach or suggest “planarizing the first thickness of the conformal layer to a second reduced thickness in a single-step to form therefrom an upper surface for each isolation trench that is co planar to the other upper surfaces.” Instead, Omid-Zohoor teaches a multi-step method including deposition of a reverse-resist mask 368 over trench regions 356 and subsequent wet or dry etch to partially remove oxide layer 364 and leave a reduced thickness oxide layer 372 with ridges 373. Then, the reduced thickness oxide layer 372 is subsequently treated by chemical-mechanical polishing (planarizing) until silicon nitride layer 344 is exposed. Such is not the presently claimed invention. Poon fails to cure the deficiencies of Omid-Zohoor. As the proposed combination of references fails to teach or suggest every element of the presently claimed invention, Applicants respectfully submit Omid-

Zohoor in view of Poon cannot render claim 7 of the presently claimed invention obvious. Accordingly, claim 7 is allowable.

Claims 8-13 are each allowable as depending from allowable claim 7.

Claim 9 is further allowable as the cited references fail to teach or suggest removing the first dielectric layer using an etch recipe that etches the first dielectric layer faster than the conformal layer and the spacers by a ratio in a range from about 1:1 to about 2:1.

Claim 12 is further allowable because the cited references do not teach or suggest that the upper surface for each of the isolation trenches is formed in an etch process using an etch recipe that etches the first dielectric layer faster than the conformal layer and the spacers by a ratio in a range from about 1:1 to about 2:1.

Claims 10, 13, are further allowable because the cited references do not teach or suggest that the ratio is in a range from about 1.3:1 to about 1.7:1.

Independent claim 14 is allowable at least for substantially the same reasons as independent claims 1 and 7. Claim 14 of the presently claimed invention recites in part “selectively removing the conformal second silicon dioxide layer and the spacers to form an upper surface for each isolation trench that is co-planar to the other upper surfaces and being situated above the pad oxide layer, wherein a material that is electrically insulative extends continuously between and within the plurality of isolation trenches, and wherein selectively removing is performed directly on the conformal second silicon dioxide layer and in the absence of masking the conformal second silicon dioxide layer over each isolation trench.” Support for the amendment may be found throughout the specification, including, for example, FIGs. 6A and 6B and related text and page 14, line 14– page 15, line 10.

As discussed herein, Omid-Zohoor fails to teach or suggest that “selectively removing is performed directly on the conformal second silicon dioxide layer and in the absence of masking the conformal second silicon dioxide layer over each isolation trench.” Instead, Omid-Zohoor teaches deposition of a reverse-resist mask 368 over trench regions 356 followed by selective removal of the oxide layer 364. Such is not the presently claimed invention. Poon fails to cure the deficiencies of Omid-Zohoor. As the proposed combination of references fails to teach or suggest every element of the presently claimed invention, Applicants respectfully submit Omid-

Zohoor in view of Poon cannot render claim 14 of the presently claimed invention obvious. Accordingly, claim 14 is allowable.

Claims 15-17 are each allowable as depending from allowable claim 14.

Independent claim 18 is allowable at least for substantially the same reasons as independent claim 14. Claim 18 of the presently claimed invention recites in part “planarizing the conformal third layer to form therefrom an upper surface for each said isolation trench that is co-planar to the other said upper surfaces comprising directly planarizing the conformal third layer and each of the spacers to form therefrom the co-planar upper surfaces in the absence of masking the conformal third layer over each of the isolation trenches.” Support for the amendment may be found throughout the specification, including, for example, FIGs. 6A and 6B and related text and page 14, line 14– page 15, line 10.

As discussed herein, Omid-Zohoor fails to teach or suggest “directly planarizing the conformal third layer and each of the spacers to form therefrom the co-planar upper surfaces in the absence of masking the conformal third layer over each of the isolation trenches.” Instead, Omid-Zohoor teaches a multi-step method including deposition of a reverse-resist mask, etching and a subsequent planarization step. Poon fails to cure the deficiencies of Omid-Zohoor. As the proposed combination of references fails to teach or suggest every element of the presently claimed invention, Applicants respectfully submit Omid-Zohoor in view of Poon cannot render claim 18 of the presently claimed invention obvious. Accordingly, claim 18 is allowable.

Claims 19-22 are each allowable as depending from allowable claim 18.

Independent claims 24 and 25 are allowable at least for substantially the same reasons as stated herein. Claims 24 and 25 of the presently claimed invention include the similar element of “filling each isolation trench of the plurality of isolation trenches with a conformal third layer, the conformal third layer having a top surface and extending above the oxide layer in contact with a corresponding pair of the spacers” and “planarizing the conformal third layer to form therefrom an upper surface for each isolation trench of the plurality of isolation trenches that is co-planar to the other upper surfaces, wherein planarizing the conformal third layer is performed directly on the top surface of the conformal third layer in the absence of masking the conformal third layer over each of the isolation trenches.” Support for the amendment may be found

throughout the specification, including, for example, FIGs. 6A and 6B and related text and page 14, line 14– page 15, line 10.

As discussed herein, Omid-Zohoor fails to teach or suggest “planarizing the conformal third layer is performed directly on the top surface of the conformal third layer in the absence of masking the conformal third layer over each of the isolation trenches.” Omid-Zohoor fails to teach or suggest that the initial top surface of the conformal third layer is planarized. Instead, Omid-Zohoor teaches a multi-step method including deposition of a reverse-resist mask and etching and a subsequent step which planarizes an already reduced oxide layer. Poon fails to cure the deficiencies of Omid-Zohoor. As the proposed combination of references fails to teach or suggest every element of the presently claimed invention, Applicants respectfully submit Omid-Zohoor in view of Poon cannot render claims 24 and 25 of the presently claimed invention obvious. Accordingly, claims 24 and 25 are allowable.

Independent claim 26 is allowable at least for substantially the same reasons as stated herein. Claim 26 of the presently claimed invention recites in part “planarizing the conformal third layer in a single-step by an etch” and “wherein planarizing the conformal third layer is performed in the absence of masking the conformal third layer over each of the isolation trenches.” Support for the amendment may be found throughout the specification, including, for example, FIGs. 6A and 6B and related text and page 14, line 14– page 15, line 10.

As discussed herein, Omid-Zohoor fails to teach or suggest “planarizing the conformal third layer in a single-step by an etch” and “wherein planarizing the conformal third layer is performed in the absence of masking the conformal third layer over each of the isolation trenches.” Instead, Omid-Zohoor teaches a multi-step method including deposition of a reverse-resist mask and etching and a subsequent step which planarizes an already reduced oxide layer. Poon fails to cure the deficiencies of Omid-Zohoor. As the proposed combination of references fails to teach or suggest every element of the presently claimed invention, Applicants respectfully submit Omid-Zohoor in view of Poon cannot render claim 26 of the presently claimed invention obvious. Accordingly, claim 26 is allowable.

Claim 27 is allowable as depending from allowable claim 26.

Independent claim 31 is allowable at least for the same reasons as claim 26. Claim 31 of

the presently claimed invention recites in part “planarizing the conformal second layer and each of the spacers to form therefrom an upper surface for each isolation trench that is co-planar to the other upper surfaces and is situated above the oxide layer, wherein planarizing is performed in a single-step and in the absence of masking the conformal second layer over each of the isolation trenches.” Support for the amendment may be found throughout the specification, including, for example, FIGs. 6A and 6B and related text and page 14, line 14– page 15, line 10.

As discussed herein, Omid-Zohoor fails to teach or suggest “planarizing the conformal second layer in a single-step and in the absence of masking the conformal second layer over each of the isolation trenches.” Instead, Omid-Zohoor teaches a multi-step method including deposition of a reverse-resist mask and etching and a subsequent step which planarizes an already reduced oxide layer. Poon fails to cure the deficiencies of Omid-Zohoor. As the proposed combination of references fails to teach or suggest every element of the presently claimed invention, Applicants respectfully submit Omid-Zohoor in view of Poon cannot render claim 31 of the presently claimed invention obvious. Accordingly, claim 31 is allowable.

Claims 32-34 are each allowable as depending from allowable claim 31.

Applicants therefore respectfully request that the rejection of claims 1, 3-22, 24-27, and 31-34 under 35 U.S.C. § 103(a) be withdrawn.

B. Claims 35-40, 42, and 43 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Omid-Zohoor patent in view of Wolf. Applicants respectfully traverse the rejection.

The discussion of Omid-Zohoor is incorporated herein. Wolf is cited for teaching that the top edge of an isolation trench may be rounded and that the semiconductor substrate may be doped. Applicants respectfully submit the proposed combination of references fail to teach or suggest every element of the presently claimed invention.

Independent claim 35 of the presently claimed invention recites in part, “a planar upper surface formed from the second layer and the spacer and being situated above the oxide layer, wherein the planar upper surface is formed by planarizing the top surface of the second layer in the absence of masking the second layer over each of the isolation trenches.” Support for the

amendment may be found throughout the specification, including, for example, FIGs. 6A and 6B and related text and page 14, line 14– page 15, line 10.

As discussed herein, Omid-Zohoor fails to teach or suggest “planarizing the top surface of the second layer in the absence of masking the second layer over each of the isolation trenches.” Instead, Omid-Zohoor teaches a multi-step method including deposition of a reverse-resist mask and etching and a subsequent step which planarizes an already reduced oxide layer. Wolf fails to cure the deficiencies of Omid-Zohoor. As the proposed combination of references fails to teach or suggest every element of the presently claimed invention, Applicants respectfully submit Omid-Zohoor in view of Wolf cannot render claim 35 of the presently claimed invention obvious. Accordingly, claim 35 is allowable.

Claims 36 and 37 are both allowable as depending from allowable claim 35.

Independent claim 38 of the presently claimed invention recites in part “a planar upper surface formed from the second layer and the spacer and being situated above the oxide layer, wherein the planar upper surface is formed by directly planarizing the second layer in the absence of masking the second layer over each of the isolation trenches.” Support for the amendment may be found throughout the specification, including, for example, FIGs. 6A and 6B and related text and page 14, line 14– page 15, line 10.

As discussed herein, Omid-Zohoor fails to teach or suggest that “the planar upper surface is formed by directly planarizing the second layer in the absence of masking the second layer over each of the isolation trenches.” Instead, Omid-Zohoor teaches a multi-step method including deposition of a reverse-resist mask and etching and a subsequent step which planarizes an already reduced oxide layer. Wolf fails to cure the deficiencies of Omid-Zohoor. As the proposed combination of references fails to teach or suggest every element of the presently claimed invention, Applicants respectfully submit Omid-Zohoor in view of Wolf cannot render claim 38 of the presently claimed invention obvious. Accordingly, claim 38 is allowable.

Claims 39 and 40 are both allowable as depending from allowable claim 38.

Independent claim 42 of the presently claimed invention recites in part “forming with a single etch recipe in the absence of a mask a planar upper surface from the conformal second layer and the first and second spacers of the respective first and second isolation structures, and

being situated above the oxide layer.” As discussed herein, Omid-Zohoor fails to teach or suggest this element. Instead, Omid-Zohoor teaches a multi-step method including deposition of a reverse-resist mask and etching and a subsequent step which planarizes an already reduced oxide layer. Wolf fails to cure the deficiencies of Omid-Zohoor. As the proposed combination of references fails to teach or suggest every element of the presently claimed invention, Applicants respectfully submit Omid-Zohoor in view of Wolf cannot render claim 42 of the presently claimed invention obvious. Accordingly, claim 42 is allowable.

Independent claim 43 recites in part, “forming a conformal second layer having a top surface” and “planarizing the conformal second layer and the first and second spacers” “wherein the planarizing is performed directly on the top surface of the conformal second layer in the absence of masking the conformal second layer over each of the isolation trenches.” Support for the amendment may be found throughout the specification, including, for example, FIGs. 6A and 6B and related text and page 14, line 14– page 15, line 10.

As discussed herein, Omid-Zohoor fails to teach or suggest that “planarizing is performed directly on the top surface of the conformal second layer in the absence of masking the conformal second layer over each of the isolation trenches.” Instead, Omid-Zohoor teaches a multi-step method including deposition of a reverse-resist mask and etching and a subsequent step which planarizes an already reduced oxide layer. Wolf fails to cure the deficiencies of Omid-Zohoor. As the proposed combination of references fails to teach or suggest every element of the presently claimed invention, Applicants respectfully submit Omid-Zohoor in view of Wolf cannot render claim 43 of the presently claimed invention obvious. Accordingly, claim 43 is allowable.

Applicants therefore respectfully request that the rejection of claims 35-40, 42, and 43 under 35 U.S.C. § 103 be withdrawn to comply with 35 U.S.C. §132.

ENTRY OF AMENDMENTS

The amendments to the claims above should be entered by the Examiner because the amendments are supported by the as-filed specification and drawings and do not add any new matter.

CONCLUSION

Claims 1, 3-22, 24-27, 31-39, 42 and 43 are believed to be in condition for allowance, and an early notice thereof is respectfully requested. Should the Examiner determine that additional issues remain which might be resolved by a telephone conference, the Examiner is respectfully requested to contact Applicants' undersigned attorney.

Respectfully submitted,



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